Governmental and 1 is a non-Governmental Organisation (NGO). These organisations belong to 7 Asian countries viz. Singapore, Thailand, Philippines, Bangladesh, India, Malaysia, and Mangolia. AHEAD is registered under the Indian Societies' Registration Act. The consortium seeks to bring out and market Asian Health and other related information in modern electronic format based on inputs received from participating members. Member organisations contribute to AHEAD, information and database inputs over which they hold copyright. AHEAD prepares the CD-ROM of the data and holds copyright ownership of it, for which it pays royalties to the contributing organisation. National Institute of Science Communication (NISCOM) contributes two database to AHEAD i.e. Wealth of India and Medicinal and Aromatic Plants Abstracts. The AHEAD is supported by funds from the International Development Research Centre (IDRC) Canada and NISCOM as lead organisation member has committed to provide infrastructural and a limited technical manpower support.

Ecpenditure on R & D

1197. SHRI GOVINDRAO ADIK: Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

(a) whether it is a fact that inspite of best intentions and declaration, growth in the expenditure on Research and Development as percentage of GDP has been almost stagnant for over the past five years;

(b) if so, the details thereof for the last five years;

(c) the steps taken during Eighth Plan period to boost R&D activities and the results thereof; and

(d) the details of agenda of action for substantial step up of R&D activities during 1998-99 and Ninth Plan period?

THE MINISTER OF SCIENCE AND TECHNOLOGY (DR. MURLI MANOHAR JOSHI): (a) and (b) According to the latest available official statistics, the expenditure on Research & Development (R&D) in India as percentage of Gross National Product (GNP) has been around 0.8% during past few years. But in absolute terms, India's R&D expenditure has increased over the years from Rs. 3974.17 Crores in 1990-91 to Rs. 6821.02 Crores in 1994-95. This compilation does not take into account the expenditure that might have been incurred by other entities, including businesses and companies which have not applied for recognition of their in-house R&D units by Department of Scientific and Industrial Research (DSIR).

(c) Government have introduced several fiscal incentives and other support measures from time to time to boost R&D activities in the country. These include:

Income tax relief of R&D expenditure.

Weighted Tax deduction for sponsored research.

Customs Duty exemption on goods imported for use in Government funded R&D projects.

Five year tax Holiday for commercial R&D companies.

Excise duty waiver for three years on goods produced based on indigenously developed technologies and duly patented in any one of the countries in European Union and in USA or Japan or in both.

Accelerated Depreciation Allowance on new plant and machinery set up based on indigenous technology.

Price control exemption on domestic R&D based bulk drugs.

Increasing the number of National Awards for outstanding R&D achievements and commercialization of public funded R&D.

Setting up of Technology Development Board in September, 1996.

R&D expenditure in the Industrial sector has shown an upward trend from Rs. 964.51 crores in 1990-91 to Rs. 1804.90 crores in 1994-95.

(d) the plan expenditure for Central Government S&T Departments/Agencies over the years has steadily been stepped up. The plan outlay has been increased from Rs. 1606 crore in 1996-97 (Terminal year of the Eighth Plan) to Rs. 1774 crore (RE) and Rs. 2418 crore (BE) for 1997-98 and 1998-99 respectively. The broad strategy for S&T development in the 9th plan include, among other activities; i) Interaction of S&T in all development activities, ii) Priority in society related programs, iii) Use of S&T in mission mode projects, iv) Joint R&D projects with industry, v) Improvement of S&T education and training, vi) Promotion of advanced research in frontier areas, vii) Improvement of infrastructure facilities for R&D, viii) Fiscal incentives for conducting research, ix) Commercialisation of research results, x) Support to information technology and xi) Encouragement to young outstanding scientists.

Commercial Potential of Drugs discovered by CSIR

1198. *SHRI GOVINDRAO ADIK:* Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state;

(a) whether the Council of Scientific and Industrial Research (CSIR) has worked out new strategies and taken fresh initiatives to fully exploit commercial potential of its newly discovered drugs;

(b) if so, the details thereof alongwith progress of implementation so far and action plan for 1997-98;

(c) what are the ongoing and proposed major R&D projects to be taken up by CSIR during Ninth Plan for new drug molecules and technologies for global market; and

(d) how many patents have been filed and secured by CSIR during the last five years with details of most outstanding achievements of the organisation?

THE MINISTER OF SCIENCE AND TECHNOLOGY (DR. MURLI MANOHAR JOSHI): (a) and (b) CSIR from time to time assesses the national and international pharmaceutical scenario to work out its strategies and initiatives to fully exploit commercial potential of its newly discovered drugs. It has accordingly focussed its short term strategy to discovering new drug leads from plant sources utilising the rich Indian knowledgebase. In 1997-98 it has licensed its newly developed plant based anti malarial drug to one Indian company for marketing.

(c) In the Ninth Plan CSIR would intensify its ongoing efforts to clinically test and commercialise the new drug molecules discovered for filariasis, osteoporosis, breast cancer, diabetes, relapse malaria, besides it would mount new projects for developing expertise and capabilities in the newer tools applied in drugs development such as high throughput screens, combinatorial chemistry, functional genomics etc.

(d) The data on patents filed and secured by CSIR in the past five years is given in the table below:—

CSIR patent applications filed and sealed in India during the period 1993-94 to 1997-98

(Codes used : F = Filed ; S = Sealed)

	1993-94		1994-95		1995-96		1996-97		1997-98	
	F	S	F	S	F	S	F	S	F	S
Indian	198	80	241	104	260	93	209	92	264	168
Foreign	17	12	29	10	58	14	70	15	91	20

The outstanding patent achievements have been for Bioenhancer, Picroliv, Adipic Acid, Linear Alkyl Benzene, Polycarbonates, Betathiamidene etc.